

# ***Catalog of Coal Mine Methane Project Finance Sources***



*July, 2002*



## **COALBED METHANE OUTREACH PROGRAM**

The Coalbed Methane Outreach Program (CMOP) is a part of the U.S. Environmental Protection Agency's (U.S. EPA) Climate Protection Partnerships Division. CMOP is a voluntary program that works with coal companies and related industries to identify technologies, markets, and means of financing for projects that profitably recover and use coal mine methane (CMM), a greenhouse gas that would otherwise be vented to the atmosphere.

This catalog has been developed as part of ongoing assistance to CMM project developers. In addition to information on project finance, CMOP also makes available a broad range of resource material on the technical and economic feasibility of CMM capture and use, the locations and characteristics of gassy mines, CMM development potential in the US and abroad, and international CMM project development assistance organizations. To access the full breadth of project identification and development support that CMOP makes available, visit the program web site at <http://www.epa.gov/coalbed>.

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### **ACKNOWLEDGMENTS**

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### **NOTE ON CATALOG UPDATES**

EPA welcomes comments, updates, and requests for inclusion in this catalog. Contact Karl Schultz at [schultz.karl@epa.gov](mailto:schultz.karl@epa.gov)



## **I. INTRODUCTION**

One of the greatest challenges facing potential coal mine methane (CMM) project developers is securing the financing necessary for project development and for acquiring capital equipment. However, there are many possible finance sources available to support CMM projects.

This catalog describes six categories of potential CMM project finance sources:

- **Private Finance Sources** – A number of private companies have been active for years in assisting project developers to secure financing for energy and environmental projects in the US and abroad. These include direct finance sources as well as some organizations that assist project developers indirectly by identifying and facilitating communication with possible finance sources.
- **Federal Finance Sources** – Various agencies within the US government offer grants and other support for environmentally sound energy projects, including those using CMM.
- **Multilateral and Other International Institutions** – These organizations finance projects that are consistent with environmentally sound energy sector development, balanced natural resource management, sustainable development, and/or other criteria.
- **Greenhouse Gas Emissions Brokerages** – An active world market for greenhouse gas (GHG) emission reductions (often referred to as carbon credits or emission reduction credits) has emerged and is growing. Within that market, CMM projects offer the potential to create GHG emission reductions of especially high quality, and therefore are particularly attractive. Reductions may in many instances improve project economics.
- **States** – Various states provide incentives to attract new businesses and for existing businesses to expand their facilities. These incentives can be in the areas of loans, grants, or reduced taxes, etc.

## **II. PRIVATE FINANCE SOURCES**

A number of private companies assist project developers to secure financing for energy and environmental projects in the US and in other countries. Following is a listing of some direct finance sources as well as some organizations that assist project developers indirectly by identifying and facilitating communication with possible finance sources.

### **1. ABB Financial Services**

Financial Unit of Equipment Supplier

ABB Financial Services, a global financial services unit of ABB, offers large and small financial packages. Their services include project underwriting and debt financing, project development and equity financing for independent power producers, and financial consulting services. In 1999 ABB introduced the Customer Finance Program, which offers a range of standard financing products, such as leasing, that are suited to orders of \$10 million or less.

Contact information:

<http://www.abb.com>

Herb Muther

Tel: (508) 870-8216

### **2. Caterpillar Financial Services Corporation**

Financial Unit of Equipment Supplier

Cat Financial, the financial arm of Caterpillar Inc., offers a wide range of financing alternatives for the complete line of Caterpillar equipment including Solar gas turbines and related products. Cat Financial creates financing and leasing plans to match customers' business and tax minimization needs in the US and in other countries. The company has used an asset leasing structure for most of its projects, but will provide project financing, after appropriate due diligence, or recourse financing where the sponsors have sufficient credit strength.

Contact information:

<http://www.cat.com/services>

David Shurson

Tel: (615) 341-8078

Fax: (615) 341-8591

E-mail: [david.shurson@cat.com](mailto:david.shurson@cat.com)

### **3. DTE Energy**

Finance Provider

DTE Energy is a Detroit-based diversified energy company involved in the development and management of energy-related businesses and services nationwide including gas production, storage, transmission and distribution. DTE Energy's principal operating subsidiaries are Detroit Edison, an electric utility and Michigan Consolidated Gas Co. (MichCon), a natural gas utility, both serving customers in Michigan. DTE's upstream gas group is interested in participating in CBM/CMM projects (as well as other unconventional gas projects) that allow it to leverage its experience in downstream technologies such as gas processing, gas gathering and transportation, and power generation. The company will participate in projects on an equity basis.

Contact information:

[www.dteenergy.com](http://www.dteenergy.com)

Steven Prelipp

Tel: (734) 913-5576

E-mail: [prelipps@dte-energy.com](mailto:prelipps@dte-energy.com)

#### **4. Everest Energy**

Finance Provider

Everest Energy is a Michigan based company that invests in the exploration, development, transportation and marketing of coalbed and coal mine methane. The company is currently focused on its +/- 40,000-acre holdings in the Powder River Basin and the associated 73-mile transmission pipeline. Everest is interested in developing energy related projects located in the lower 48 states and Canada.

Contact information:

Lance Sheehy, Director of Exploration

Tel: 303/526-1091

Email: [marsheehy@aol.com](mailto:marsheehy@aol.com)

#### **5. First National Bank of Chicago**

Full Service Bank

First National Bank of Chicago's Energy Investments Group invests equity with companies that own or operate energy assets. In so doing, they enable such companies to monetize energy assets and unused energy tax credits.

Contact information:

<http://www.bankone.com/capcorp/energy>

John Eber

Tel: (312) 732-5717

E-mail: [johneber@bankone.com](mailto:johneber@bankone.com)

#### **6. FondElec Group Inc.**

Finance Provider

FondElec Group Inc. is a private equity investment firm that invests in businesses where they can exercise substantial input into the structuring, strategic planning, and financial direction of the target investment. Their goal is to invest in the build-out of basic infrastructure, bringing an enhanced quality of service to global-market consumers while earning superior returns to their investors.

Contact information:

<http://fondelec.com>

Fernanda Acosta-Rua, Vice President

Tel: (203) 326-4570

E-mail: [facostarua@fondelec.com](mailto:facostarua@fondelec.com)

**7. GE Capital Global Energy**  
Finance Provider

GE Capital Global Energy, a wholly-owned subsidiary of General Electric Company, is a global, diversified financial services company. GE Capital Global Energy provides debt and equity financing for energy projects. It invests in high-yield debt opportunities around the world. Investments are negotiated directly through institutional private placements or bank syndications. Their finance vehicles include leases, limited partnerships, limited partnership equity, preferred equity, project common equity, and project finance.

Contact information:

[http://www.gestructuredfinance.com/energy/eng\\_overview.asp](http://www.gestructuredfinance.com/energy/eng_overview.asp)

[http://www.global.energy@gecapital.com](mailto:alex.urquhart@gecapital.com)

Alex Urquhart, Managing Director

Tel: 888-969-6755

**8. Global Environment Fund Group**  
Investment Management/Mutual Funds

The Global Environment Fund is an international investment management firm that invests in and provides management support to companies that make positive contributions to environmental quality, human health, and the sustainable management of natural resources. The Fund is currently managing a group of private equity investment funds, including two funds dedicated to basic environmental infrastructure in emerging markets and a US fund focusing on technologies that promote improved efficiency in the industrial process, energy generation, and telecommunications fields. In addition, through its own capital investment vehicle, Global Environment Capital Company, LLC, the Fund develops, finances, and takes controlling interest in principal investments for its own account.

Contact information:

<http://www.globalenvironmentfund.com>

John Stethens

Tel: (202) 789-4500

E-mail: [reception@globalenvironmentfund.com](mailto:reception@globalenvironmentfund.com)

**9. Global Finance Corporation**  
Finance Advisor/Provider

Global Finance Corporation and its associates provide banking, leasing, and corporate finance services both domestically and internationally. The company's services include private placements of debt, equity, and tax credits; business advisory services; and mergers and acquisitions.

Contact information:

Donald Reid

Tel: (847) 835-9000

E-mail: [donreid@msn.com](mailto:donreid@msn.com)

**10. Heller Financial**  
Finance Provider

Heller Financial offers financial products and services designed to meet the needs of mid-sized and small businesses in the US and in other countries. Heller provides US-based clients with equipment financing and leasing and working capital loans, collateral-based financing, cash flow financing, real estate financing, small business lending, and project financing investments.

Contact information:

<http://www.hellerfinancial.com>

Mike Hammond

Tel: (312) 441-7624; (312) 441-7000

E-mail: [mhammond@hellerfin.com](mailto:mhammond@hellerfin.com)

**11. Michigan National Bank**  
Full Service Bank

Michigan National Bank (MNB) is a medium-sized regional bank that is active in providing debt financing to projects in the alternative energy field. The bank has experience lending to projects on a project financing basis as well as to projects that have creditworthy sponsors. It provides both construction loans and permanent debt on a senior basis.

Contact information:

<http://www.michigannational.com>

James Tesen, Vice President

Tel: (248) 473-3295

E-mail: [James.Teson@mnco.com](mailto:James.Teson@mnco.com)

**12. Monarch Financial Corporation**  
Investment Banker and Financial Advisor

Monarch Financial Corporation is an independent, privately owned investment banking and financial advisory firm that works exclusively in the mining, energy, and natural resource industries. It focuses on corporate financial transactions, mergers, and acquisitions and on raising financing for international resource companies.

Contact information:

Ray McCormick, President

Tel: (412) 531-9434

E-mail [monarch@stargate.net](mailto:monarch@stargate.net)

**13. Siemens Financial Services**  
Finance Advisor/Provider

Siemens AG is a leader in a number industrial sectors, including energy and power. The Siemens Financial Services group of companies (with offices in US, Canada, eastern and western Europe, and South Africa) offers a wide range of financing solutions and services, including project financing, to industrial and service companies worldwide.

Contact information:

<http://www.siemens.com>

Johannes Schmidt, Head of Project Finance & Placement

Tel: 011-49-9131-18-4181

Fax: 011-49-9131-18-2942

### **III. FEDERAL FINANCE SOURCES**

Various agencies within the US government offer grants and other support to environmentally sound energy projects including those using coal mine methane. Below is a list of major agencies offering financing for energy related projects.

#### **A. Domestic Programs**

##### **1. Inventions and Innovations Grants Program - Department of Energy, Office of Industrial Technologies**

The Inventions and Innovation Grants Program is conducted as part of the mission of the Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy (EERE). Its mission is to develop and promote the adoption of cost-effective renewable energy and energy efficiency. Inventions and Innovation grants up to \$200,000 for well developed inventions moving toward prototype development or commercialization. Inventions and Innovations Grants are open to US citizens, small businesses that are US-owned, or institutions of higher learning located in the US for technologies within the areas of industry, power, transportation, or buildings.

Contact information:

<http://www.oit.doe.gov/inventions>

Lisa Barnett

Tel: (202) 586-2212

##### **2. National Industrial Competitiveness through Energy, Environment, and Economics (NICE<sup>3</sup>) Grants - Department of Energy, Office of Industrial Technologies**

NICE<sup>3</sup> provides grant funding for the first commercial demonstration of energy-efficient and clean production manufacturing and industrial technologies in industry. NICE<sup>3</sup> emphasizes funding projects within the Office of Industrial Technologies focus industries (which include mining and petroleum). Financial assistance of up to \$525,000 is provided to state and industry partnerships. The industrial partner may receive a maximum of \$500,000 in federal funding. Nonfederal cost share must be at least 50 percent of the total cost of the project.

Contact information:

<http://www.oit.doe.gov/nice3>

Lisa Barrett

Tel: (202) 586-2212

##### **3. U.S. Environmental Protection Agency - Environmental Finance Program**

The U.S. Environmental Protection Agency has developed the Environmental Finance Program to assist communities in their search for creative approaches to funding their environmental projects. Drawing on the financing expertise of staff, the Environmental Financial Advisory Board, and the university-based Environmental Finance Center Network, the Program seeks to lower costs, increase investment, and build capacity by creating partnerships with state and local governments and the private sector to fund environmental needs.

Contact information:

<http://www.epa.gov/efinpage>

Ms. Alecia Crichlow

Tel: (202) 564-5188  
E-mail: [crichlow.alecia@epa.gov](mailto:crichlow.alecia@epa.gov)  
E-mail: [efin@epa.gov](mailto:efin@epa.gov)

#### **4. U.S. Small Business Administration Loan Programs**

The U.S. Small Business Administration (SBA) operates both a loan fund and a new program, called CAPLines, which may offer financial assistance for CMM projects. The loan program assists small businesses engaged in energy technology and energy efficiency. The SBA works with a designated financial institution to guarantee such loans if certain requirements are met. CAPLines provides federally guaranteed revolving lines of credit up to \$750,000 or 75 percent of the loan amount, whichever is less, to small businesses.

Contact information:

<http://www.sba.gov/financing/indexloans.html>  
US Small Business Administration  
Office of Business Initiatives  
Tel: (800) 827-5722 or (202) 606-4000

### **B. International Programs**

#### **1. BISNIS FinanceLink – U.S. Department of Commerce**

BISNIS FinanceLink is an export assistance service that helps US companies who seek financing by distributing to US-incorporated financial service providers' summaries about transactions or projects where the US company has already identified a buyer or partner in the Newly Independent States of the former Soviet Union. A US company seeking funding from BISNIS FinanceLink for an eligible project (i.e., one that embodies at least 51 percent US content) can complete a form included in the program's website. BISNIS then forwards the lead to financial service providers that participate in the program. These providers must be incorporated in the US and conduct their business in the US.

Contact information:

<http://www.bisnis.doc.gov>  
Trevor Gunn, Acting Director  
Tel: (202) 482-4656  
E-mail: [Trevor\\_Gunn@ita.doc.gov](mailto:Trevor_Gunn@ita.doc.gov)

#### **2. Overseas Private Investment Corporation (OPIC)**

OPIC supports projects in developing countries and in countries in transition from nonmarket to market economies. OPIC assists U.S. investors by insuring investments overseas against a broad range of political risks; financing of businesses overseas through loans and loan guaranties; financing private investment funds that provide equity to businesses overseas; and advocating the interests of the American business community overseas. All of OPIC's guaranty and insurance obligations are backed by the full faith and credit of the United States of America. OPIC can offer up to \$400 million in total project support for any one project, up to \$200 million in project finance, and up to \$200 million in political risk insurance.

Contact information:

<http://www.opic.gov>  
Overseas Private Investment Corporation

Tel: (202) 336-8799  
<http://www.info@opic.gov>

### **3. The Trade Information Center (TIC)**

The Trade Information Center is a comprehensive resource for information on all US federal government export assistance programs. The Trade Administration of the US Department of Commerce operates the TIC for the 20 federal agencies comprising the Trade Promotion Coordinating Committee. These agencies are responsible for managing the US government's export promotion programs and activities.

Contact information:

<http://www.ita.doc.gov>

Trade Information Center, International Trade Administration

Tel: (202) 482-4473

E-mail: [TIC@ita.doc.gov](mailto:TIC@ita.doc.gov)

### **4. U.S. Trade and Development Agency**

The U.S. Trade and Development Agency (TDA) funds feasibility studies, orientation visits, specialized training grants, business workshops, and various forms of technical assistance, to enable American businesses to compete for infrastructure and industrial projects in middle-income and developing countries. The TDA is involved in projects including energy, environment, and mining.

Contact information:

<http://www.tda.gov>

TDA Information Resource Center

Tel: (703) 875-4357

### **5. U.S. Export-Import Bank (Ex-Im Bank)**

The Export-Import Bank of the United States (Ex-Im Bank) is an independent U.S. government agency that helps finance the overseas sales of U.S. goods and services. Ex-Im Bank also provides credit insurance that protects U.S. exporters against the risks of nonpayment by foreign buyers for political or commercial reasons. Ex-Im Bank programs include working capital guarantees, export credit insurance, medium- and long-term guarantees, and project finance.

Contact information:

<http://www.exim.gov>

Export-Import Bank of the U.S.

Washington, D.C. Office

(800) 565-EXIM (3946), (202) 565-EXIM (3946)

#### **IV. MULTILATERAL AND OTHER INTERNATIONAL ORGANIZATIONS**

A number of multilateral and other organizations around the world can provide financing for projects that are consistent with environmentally sound energy sector development, balanced natural resource management, and/or sustainable development.

##### **1. Asian Development Bank (ADB)**

The Asian Development Bank is a nonprofit multilateral development finance institution dedicated to reducing poverty in Asia and the Pacific. It raises funds through bond issues and member financing. The ADB also provides assistance to private enterprises of developing member countries through equity investments and loans. In the energy sector, coal subsector, the ADB will assist developing member countries in assimilating and commercializing extraction of coalbed methane.

Contact information:

<http://www.adb.org>

Tel: (632) 632-4444 (Philippines)

E-mail: [information@adb.org](mailto:information@adb.org)

##### **2. Canadian International Development Agency (CIDA)**

The Canadian International Development Agency has several funding mechanisms: the Industrial Cooperation Program (CIDA-INC), a shared-cost program to support private sector firms seeking to expand into developing countries; the Renaissance Eastern Europe (REE) Program, a cost-sharing program targeted to companies that are contemplating long-term investments in the Central and Eastern Europe region; the Canadian Technical Cooperation Trust Fund, a fund supporting contracts for work on activities in the priority sectors including environment and energy, in particular oil and gas; and the Bilateral Responsive Mechanism, a tool for both profit and not-for-profit organizations that want to submit a proposal for funding.

Contact information:

<http://www.acdi-cida.gc.ca/gettingfunding.htm>

Tel: (819) 997-5006

Tel: (800) 230-6349

##### **3. CDC Capital Partners**

Formerly known as the Commonwealth Development Corporation, CDC Capital identifies and supports commercially sustainable business ventures in emerging markets. The group provides risk capital investment and where appropriate, management and technical expertise to the project. CDC Capital is in the process of becoming a public private partnership – essentially a joint venture between the UK government and the private sector.

Contact information:

[www.cdcgroup.com](http://www.cdcgroup.com)

Tel: 44-20-7963-3864

Email: [info@cdcgroup.com](mailto:info@cdcgroup.com)

#### **4. European Bank For Reconstruction And Development (EBRD)**

The European Bank for Reconstruction and Development promotes private and entrepreneurial initiatives in the countries of Central and Eastern Europe and the Commonwealth of Independent States through direct financing for private sector activities. The main forms of EBRD financing are loans, equity investments (shares) and guarantees. The EBRD strongly encourages cofinancing through commercial banks, official co-financing institutions, export credit agencies, and international financial institutions. Although the standard minimum involvement for the Bank is □ 5 million, that requirement may be reduced if a project has fundamental benefits for the host country.

Contact information:

<http://www.ebrd.org/english/index.htm>  
European Bank for Reconstruction and Development  
Beverley Harrison  
Tel: 011-44-20-7338-6282  
E-mail: [harrisob@ebrd.com](mailto:harrisob@ebrd.com)

#### **5. European Investment Bank (EIB)**

The European Investment Bank, the European Union's financing institution, raises on the markets substantial volumes of funds that it directs on the most favorable terms towards financing capital projects. Outside the European Union, the EIB implements the financial components of agreements concluded under European development aid and cooperation policies. Financial services offered through the EIB include direct loans, venture capital, and structured finance facility.

Contact information:

[www.eib.org](http://www.eib.org)  
Tel: 352-43-79-1  
Email: [info@eib.org](mailto:info@eib.org)

#### **6. Export Development Corporation (EDC)**

EDC is a Canadian financial institution devoted exclusively to providing trade finance services to support Canadian exporters and investors in some 200 markets, 130 of which are in developing markets. Financial services offered by EDC include credit insurance, bonding and guarantees, political risk insurance, direct loans to buyers and lines of credit in other countries. EDC also provides limited recourse financing arrangements, and joint ventures for projects involving long-term leasing arrangement and equity participation.

Contact Information:

[www.edc-see.ca](http://www.edc-see.ca)  
Tel: 1-613-598-2500  
Email: [info@cdc-see.ca](mailto:info@cdc-see.ca)

#### **7. Global Environment Facility (GEF)**

The Global Environment Facility provides cost-sharing grants and concessional funding for projects and programs that protect the global environment and promote sustainable economic growth. GEF executed a CMM project in China and has one underway in India. GEF manages its projects and programs through three implementing agencies: The UN Development Programme, the UN Environment Programme, and the World Bank.

Contact information:

<http://www.gefweb.org>

Alan Miller, Team Leader, Climate Change  
Global Environment Facility Secretariat  
Tel: (202) 473-0508  
E-mail: [amiller@worldbank.org](mailto:amiller@worldbank.org)

<http://www.undp.org/gef>

Richard Hosier, Principal Technical Advisor for Climate Change  
UNDP/GEF  
Tel: (212) 906-6591  
E-mail: [Richard.Hoiser@undp.org](mailto:Richard.Hoiser@undp.org)

<http://www.worldbank.org/environment/topics.htm>

Lars Vidaeus, Program Leader  
The World Bank  
Tel: (202) 473-4188  
E-mail: [lvidaeus@worldbank.org](mailto:lvidaeus@worldbank.org)

## **8. Japan International Cooperation Agency (JICA)**

JICA is responsible for the technical cooperation of Japan's Official Development Assistance (ODA) programs. JICA makes available grants to the governments of developing countries without the obligation of repayment. Grants are available for a wide range of categories including clean energy. Countries eligible for grant aid are those that qualify for interest-free financing from the International Development Association (IDA) of the World Bank

Contact Information:

[www.jica.go.jp](http://www.jica.go.jp)

Main Office Tel: 3-5352-5311  
U.S. Office Tel: 202-293-2334

## **9. Industrial Development Corporation of South Africa, Ltd. (IDC)**

The IDC is a self-financing, state-owned development finance institution whose primary objectives are to contribute to the generation of balanced sustainable economic growth in South Africa and to further the economic empowerment of the South African population. Established in 1940, the IDC provides financing to entrepreneurs engaged in competitive industries.

Financial participation by IDC is usually by way of loan finance, but other financial instruments include equity, quasi-equity, wholesale finance, share warehousing, guarantees, export/import finance and short-term trade finance. In general, IDC finance is available for projects within South Africa, the SADC Region, and the rest of Africa.

Contact Information:

[www.idc.co.za](http://www.idc.co.za)

Tel: 27-11-269-3000  
Email: [callcentre@idc.co.za](mailto:callcentre@idc.co.za)

## **10. Inter-American Development Bank (IADB)**

The Inter-American Development Bank was created to advance economic and social development in Latin America and the Caribbean. The IADB includes the Inter-American Investment Corporation, which finances small- and medium-sized private enterprises, and the Multilateral Investment Fund, which promotes reforms and private-sector development. Current lending priorities include energy and the environment. Loans are available to public and private entities in the Latin American member countries.

Contact information:

<http://www.iadb.org>

Tel: (202) 623-1000

## **11. International Finance Corporation (IFC)**

The International Finance Corporation, a member of the World Bank Group, provides loan and equity financing and advice for private sector ventures and projects in developing countries. The Environmental Projects Unit (EPU) of the IFC seeks quality private investment projects that offer environmental benefits. CMM projects may be of interest to the EPU, especially if coordinated with activities of the IFC's Global Mining Sector or Oil, Gas and Chemicals Department.

Projects must be in the private sector, be technically sound, have a good prospect of being profitable, and benefit the local economy. The IFC generally finances projects on a nonrecourse basis, which means that the loans to the project company would be paid back by cash flows generated by the project itself and not by the project's sponsor companies.

Contact information:

<http://www.ifc.org/enviro/EPU>

Louis C. Boorstin, Manager  
Environmental Projects Unit  
Tel: (202) 473-6684  
E-mail: [lboorstin@ifc.org](mailto:lboorstin@ifc.org)

<http://www.ifc.org/enviro/EPU>

James Bond, Director  
Global Mining Department  
Tel: (202) 473-4522  
E-mail: [JBond@worldbank.org](mailto:JBond@worldbank.org)

<http://www.ifc.org/enviro/EPU>

Rashad Kaldany, Director  
Oil, Gas & Chemicals Department  
Tel: (202) 473-6787  
E-mail: [Rkaldany@ifc.org](mailto:Rkaldany@ifc.org)

## **12. KfW**

KfW was established in 1948 as a promotional bank for the German economy. Clients of KfW's investment finance, environmental and innovation finance are mainly small to medium-sized enterprises. KfW also offers advisory and other services in Germany and abroad. Loans are granted directly to buyers, banks, investors, or project companies. Borrowers may choose between loans in EUR, USD, or other foreign currencies and between fixed and variable rates.

In developing countries, KfW operates as a development bank on behalf of the German government. The bank seeks to finance projects that expand social, economic, and industrial infrastructure and to protect the environment and natural resources.

Contact information:

[www.kfw.de](http://www.kfw.de)

Tel: 49-1801-33-55-77

Email: [iz@kfw.de](mailto:iz@kfw.de)

### **13. Ministry of Economic Affairs of The Netherlands**

The Ministry of Economic Affairs of The Netherlands created the Emission Reduction Unit Procurement Tender (ERUPT) program to help companies investing in greenhouse gas-reducing Joint Implementation projects in Central and Eastern Europe improve the return on their projects. Following that successful initiative, it subsequently established the CERUPT program to assist companies investing in Clean Development Mechanism projects in Asia, Africa, and Latin America. Carbon emission reductions are purchased by Senter International, a quasi-governmental organization established to manage the ERUPT and CERUPT programs, which are coordinated through Carboncredits.nl. Projects first are to be proposed on a tender basis, and Carboncredits.nl then short lists attractive projects for proposal development. Potentially viable project types include cogeneration, fuel switching, and waste emission utilization. Senter International provides guidelines for key project parameters on their website.

Contact information:

<http://www.senter.nl/erupt>

Senter International

Tel: 011-31-70-361-04-95

E-mail: [erupt@senter.nl](mailto:erupt@senter.nl)

### **14. United Nations Development Program (UNDP)**

The United Nations Development Program provides technical assistance in the energy field to developing countries. It also implements activities that "introduce innovative technologies, mainstream environment with development, strengthen sustainable livelihoods, and initiate pilot projects that while mitigating climate change also promote sustainable human development." The UNDP (Global Environment Facility) also implements projects.

Contact information:

<http://www.undp.org/seed/eap>

Thomas Johansson, Director

Energy and Atmosphere Program

Tel: (212) 906-5030

E-mail: [Thomas.Johansson@undp.org](mailto:Thomas.Johansson@undp.org)

## **15. The World Bank - Asia Alternative Energy Program (ASTAE)**

The World Bank's Asia Alternative Energy Program finances alternative energy projects in Asia. ASTAE is actively seeking more and larger projects to increase rural access to energy and reduce greenhouse gas emissions, including projects that involve public and private sector investors. Although typically focusing on non-fossil-energy projects, CMM projects may gain the interest of ASTAE as means of achieving GHG emission reductions.

Contact information:

<http://www.worldbank.org/astae>

Yoshihiko Sumi, Program Manager

Tel: (202) 458-1405

E-mail: [ysumi@worldbank.org](mailto:ysumi@worldbank.org)

## **16. The World Bank - Energy Sector Management Assistance Programme (ESMAP)**

The World Bank's Energy Sector Management Assistance Programme can provide funding to support a range of activities including technical assistance and pilot projects relating to energy sector issues, including nontraditional energy use, to the governments of developing countries and economies in transition. ESMAP seeks to "catalyze interest and support from local stakeholders in innovative areas, and to pave the way, where appropriate, for energy projects to be funded by international financial institutions and private investors."

Contact information:

<http://www.esmap.org>

Charles Feinstein

Tel: (202) 473-2896

E-mail: [cfeinstein@worldbank.org](mailto:cfeinstein@worldbank.org)

## **17. World Bank - Prototype Carbon Fund (PCF)**

The World Bank's Prototype Carbon Fund provides financial support for projects that produce high quality greenhouse gas emission reductions. Contributors (or "participants") in the PCF receive a pro rata share of the emission reductions, verified and certified in accordance with carbon purchase agreements reached with the respective countries hosting the projects. The PCF will implement approximately half of the investments in economies in transition and half in developing countries. As a pilot activity, the PCF does not endeavor to compete in the emission reductions market; it is restricted to US\$180 million and is scheduled to terminate in 2012.

Contact information:

<http://www.prototypecarbonfund.org/home.cfm>

Ken Newcombe, Manager - Prototype Carbon Fund

Tel: (202) 473-6010

E-mail: [knewcombe@worldbank.org](mailto:knewcombe@worldbank.org)

## **V. GREENHOUSE GAS EMISSION BROKERAGES AND SPECIALISTS**

Structuring an emissions reduction sale, arriving at an equitable price for those reductions, arranging for their registration, conducting monitoring and verification, etc. can present prospective project developers with complexities. To assist emissions reductions sellers and buyers in their transactions, a number of brokerages and specialists have begun to specialize in GHG emissions reductions trading. Some of these are briefly described below.

### **1. CO2e.com**

Cantor Fitzgerald, a commodities brokerage firm, in association with the accounting firm Price Waterhouse Coopers created CO2e.com, a 24-hour on-line carbon marketplace. CO2e.com offers business tools to assist in quantifying an organization's carbon liabilities and assets, supports virtual trading simulations, and provides access to technical consultants to assist in emissions reductions investment planning.

Contact information:

<http://www.co2e.com>

Corinne Boone

Tel: 416-350-2177

Fax : 416-350-2985

E-mail: [cbooneco2e@hotmail.com](mailto:cbooneco2e@hotmail.com)

### **2. EcoSecurities Ltd.**

EcoSecurities Ltd provides a variety of services designed to help their clients plan for and respond to existing and evolving environmental policies. These include policy advisory services, financial services, and corporate finance. Their newest service line is the Enterprise Dimensions of Greenhouse Gas Emissions (EDGE), which provides step-by-step assistance to corporations and project developers interested in entering the carbon trading market, with services ranging from initial carbon offset calculation to their eventual transaction.

Contact information:

Svetlana Morozova

<http://www.ecosecurities.com>

Tel: (909) 621-1358

Fax: (909) 621-7438

E-mail: [us@ecosecurities.com](mailto:us@ecosecurities.com)

### **3. Emissions Credits International**

Emissions Credits International maintains eCarbontrade.com, an independent online trading exchange that seeks to bring buyers and sellers of high-quality GHG emissions reductions together in an auction mode.

Contact information:

<http://www.ecarbontrade.com>

Paul Floyd

Tel: 011-770-410-1210

E-mail [pfloyd@ecarbontrade.com](mailto:pfloyd@ecarbontrade.com)

#### **4. Environmental Financial Products LLC**

Environmental Financial Products both develops and trades in CO<sub>2</sub> offsets. In addition, Environmental Financial Products will administer the Chicago Climate Exchange (CCX). Headed by former Chicago Board of Trade economists and planned to be launched in the second half of 2002, CCX will be the first voluntary US pilot program for greenhouse gas trading.

Contact information:

<http://www.envifi.com>

<http://www.chicagoclimateX.com/html/index.html>

Dr. Michael J. Walsh

Tel: (312) 554-3380

Fax: (312) 554-3373

E-mail: [mwalsh@envifi.com](mailto:mwalsh@envifi.com)

#### **5. Evolution Markets LLC**

Evolution Markets focuses on emissions reductions trading and the over-the-counter coal market. Evolution Markets is characterized as an "introductory market" which represents buyers and sellers equally, charging standardized commissions to buyers and sellers. They provide trading and market information, portfolio valuation, specialized trade structuring, and advisory services. In November 2001 Evolution Markets announced that it had entered into a strategic partnership with Energy & Communications Solutions, LLC, an international energy development firm, specifically to offer investment opportunities, including those in environmental and energy commodity transactions, in Central and Eastern Europe.

Contact information:

<http://www.evomarkets.com>

Andy Ertel

Tel: (212) 430-6475

E-mail: [aertel@evomarkets.com](mailto:aertel@evomarkets.com)

#### **6. Greenhouse Gas Emissions Consortium (GEMCo)**

GEMCo is a consortium of Canadian energy companies investing in greenhouse gas reducing projects. GEMCo's membership incorporates both potential investors in and providers of projects with high greenhouse gas emission mitigation potential.

Contact information:

<http://www.gemco.org>

Tel: (604) 731-4666

E-mail: [Brianwil@istar.ca](mailto:Brianwil@istar.ca)

#### **7. Natsource**

Natsource deals in over-the-counter trading of energy products, and, through its Environmental Action Desk, their clients can take part in trading GHG emissions reduction credits on line. Recently, Natsource partnered with the accounting firm Arthur Anderson and the bank Credit Lyonnais to form the Emissions Market Development Group which has an internet-based trading platform through which it trades standardized emissions reductions units.

Contact information:

[http://www.natsource.com/environmental/action\\_desk.asp](http://www.natsource.com/environmental/action_desk.asp) (click "Emissions Trading")

Tel: (212) 896-2196

E-mail [GHGinfo@natsource.com](mailto:GHGinfo@natsource.com)

## **8. Point Carbon**

Point Carbon is a global provider of independent carbon price forecasts and analysis of greenhouse gas emissions trading markets. Point Carbon specializes in analyses to help companies understand carbon markets whose characteristics are constantly changing in response to political, market-related, emissions-related and economic factors.

Contact Information:

Jorund Buen, Partner/Analyst

Tel: +47 924 29 400

Fax : +47 924 29 400

E-mail: [jb@pointcarbon.com](mailto:jb@pointcarbon.com)

<http://www.pointcarbon.com>

## **9. The Climate Trust**

The Climate Trust initiates, encourages and funds projects that reduce greenhouse gas emissions. The trust holds rights to the carbon dioxide or other greenhouse gas reduction credits resulting from projects it funds or implements in trust for the citizens of Oregon.

Contact information:

<http://www.climatetrust.org>

Mike Burnett, Executive Director

Tel: (503) 238-1915

E-mail: [mburnett@climatetrust.org](mailto:mburnett@climatetrust.org)

## **10. Trexler and Associates**

Trexler and Associates assists their clients in identifying and implementing greenhouse gas offset projects. While not a brokerage, they work to bring greenhouse gas emission reduction buyers and sellers together. They can help project developers secure financing in a number of ways, including by listing projects in their Greenhouse Gas Offset Cost Assessment and Decisionmaking software system (GGOCAD©) to make project information readily them available to GGOCAD users.

Contact information:

<http://www.climateservices.com>

Tel: (503) 231-2727

Fax: (503) 231-2728

E-mail: [info@climateservices.com](mailto:info@climateservices.com)

## **VI. STATE RESOURCES**

### **A. State of Alabama**

#### **1. Industrial Revenue Bonds**

Industrial Revenue Bonds (IRBs), managed by the Alabama Development Office, are financing instruments issued by designated local industrial development boards or other issuers authorized by state law. IRBs provide financing for land, buildings, and equipment for new and expanding manufacturing plants.

Contact information:

<http://www.adaostate.al.us/finance1.htm>

Tel: (334) 242-0400

E-mail: [info@www.ado.state.al.us](mailto:info@www.ado.state.al.us)

#### **2. Rural Development, Business and Industry Guaranteed and Direct Loans**

The objectives of U.S. Department of Agriculture Business and Industry (B&I) loans, managed by the Alabama Development Office, are improving, developing, or financing business and industry; creating jobs; and improving the economic and environmental climate in rural communities. The maximum gross B&I Guaranteed Loan amount to any one borrower is \$25 million, and \$10 million is the maximum for Direct Loans.

Contact information:

<http://www.adaostate.al.us/finance1.htm>

Tel: (334) 242-0400

E-mail: [info@www.ado.state.al.us](mailto:info@www.ado.state.al.us)

### **B. State of Illinois**

#### **1. Illinois Coal Infrastructure Program**

The Illinois Department of Commerce and Community Affairs Coal Infrastructure Program seeks to correct infrastructure limitations that impede the prompt and economic delivery of Illinois coal to domestic and international markets. To qualify for funding, projects must offer significant economic benefits for Illinois, and should have in place a host site, private and public cost-sharing partners, etc. Any entity may apply for cost-share grants (20 percent state / 80 percent developer) typically ranging between \$50,000 and \$900,000.

Contact information:

[www.commerce.state.il.us](http://www.commerce.state.il.us)

John McCarthy

Office of Coal Development

Tel: (217) 785-1671

Fax: (217) 558-2647

#### **2. Illinois Coal Demonstration Program**

The Illinois Department of Commerce and Community Affairs Coal Demonstration Program provides financing for large-scale demonstration of advanced coal systems for both utility and industrial applications. Although any entity may apply, to qualify projects typically must

have secured a host site, power purchase agreements, private and public cost-sharing partners, etc. Funding is intended for capital projects that are located in Illinois and that have significant economic benefit for the state. Grants, which are awarded on a 20 percent state / 80 percent developer cost-share basis, typically range between \$1 million and \$30 million.

Contact information:

[www.commerce.state.il.us](http://www.commerce.state.il.us)

Paul Pierre-Louis

Office of Coal Development

Tel: (312) 814-3630

Fax: (312) 814-3891

### **3. Illinois Coal Development Program**

The Illinois Department of Commerce and Community Affairs Coal Development Program funds projects that have the potential to advance clean coal technologies. Projects may range from research, through proof-of-concept, to near-commercial demonstration. The Coal Development Program can fund up to 50 percent of project finance needs (50 / 50 cost share), with grants typically ranging from \$150,000 and \$400,000. Any entity may apply, although preference is given to Illinois applicants.

Contact information:

[www.commerce.state.il.us](http://www.commerce.state.il.us)

Michael Purnell

Office of Coal Development

Tel: (217) 785-0010

Fax: (217) 558-2647

## **C. Commonwealth of Pennsylvania**

### **1. Ben Franklin Technology Partners**

Ben Franklin Technology Partners assists new and emerging companies, in part by directly investing in firms at the critical early stage. Ben Franklin provides funding and technical assistance for new technology ventures, new product development projects, technology commercialization, workforce training, and education.

Contact information:

<http://www.benfranklin.org>

Innovation Works, Inc.

Tel: (412) 681-1520

### **2. Enterprise Zone Tax Credits**

The Pennsylvania Department of Community and Economic Development provides tax credits to offset Pennsylvania corporate tax liability up to \$250,000 of tax credits per project, per company, per year

Contact information:

[http://www.dced.state.pa.us/PA\\_Exec/DCED/business/f.eztc.htm](http://www.dced.state.pa.us/PA_Exec/DCED/business/f.eztc.htm)

[http://www.dced.state.pa.us/PA\\_Exec/DCED/community/ezlistin.htm](http://www.dced.state.pa.us/PA_Exec/DCED/community/ezlistin.htm)

Tel: (717) 787-6245  
E-mail: [ra-dcedloans@stste.pa.us](mailto:ra-dcedloans@stste.pa.us)

### **3. Keystone Opportunity Zone (KOZ/KOEZ)**

Keystone Opportunity provides state and local tax abatement to businesses and residents locating in one of the designated zones (KOZ) or designated expansion zones (KOEZ).

Contact information:

[http://www.inventpa.com/docs/business\\_financing\\_directory.pdf](http://www.inventpa.com/docs/business_financing_directory.pdf) (for general information)  
<http://www.koz.inventpa.com/contact.html> (for Keystone Opportunity Zones Contact List)

### **4. Machinery and Equipment Loan Fund**

The Machinery and Equipment Loan Fund of the Private Capital and Loans Office, Pennsylvania Department of Community and Economic Development, provides low-interest loan financing up to \$500,000 or 50% of the total eligible project costs, whichever is less, to acquire and install new or used machinery and equipment or to upgrade existing machinery and equipment.

Contact information:

[http://www.inventpa.com/docs/business\\_financing\\_directory.pdf](http://www.inventpa.com/docs/business_financing_directory.pdf)  
Tel: (717) 787-6245  
E-mail: [ra-dcedloans@stste.pa.us](mailto:ra-dcedloans@stste.pa.us)

### **5. Opportunity Grant Program (OGP)**

The Opportunity Grant Program of the Economic Development Assistance Office provides grant funds up to \$250,000 directly to businesses to create or preserve jobs within the Commonwealth. Funds may apply to job training, infrastructure improvements, land and building improvements, machinery and equipment, working capital, and environmental assessment and remediation. Projects must offer substantial economic impact for the Commonwealth or region

Contact information:

[http://www.inventpa.com/docs/business\\_financing\\_directory.pdf](http://www.inventpa.com/docs/business_financing_directory.pdf)  
Tel: (717) 787-7120  
E-mail: [ra-dcedloans@stste.pa.us](mailto:ra-dcedloans@stste.pa.us)

### **6. Pennsylvania Capital Access Program**

Through participating banks, the Pennsylvania Capital Access Program provides loan guarantees up to \$500,000 for land, buildings, equipment, and working capital.

Contact information:

[http://www.inventpa.com/docs/business\\_financing\\_directory.pdf](http://www.inventpa.com/docs/business_financing_directory.pdf)

Fidelity Deposit & Discount Bank  
Kevin R. Messett, V.P.  
Tel: (717) 342-8281

PNC Bank, N.A.  
Linda C. Smith  
Pittsburgh and Erie Regions Only  
Tel: (412) 762-2414

Mellon Bank, N.A.  
Margret Ondayko -  
Harrisburg/Pittsburgh Regions  
Tel: (412) 236-1072  
Stephen Phillips -  
Philadelphia/NE Regions  
Tel: (215) 553-1776

Financial Trust Company  
Fred Wallace  
Tel: (717) 233-6434

Pennsylvania National Bank  
David Dowd, V.P.  
Tel: (610) 562-6522

## **7. Pennsylvania Economic Development Financing Authority (PEDFA)**

The Pennsylvania Industrial Development Authority (of the Pennsylvania Department of Community and Economic Development offers both tax-exempt and taxable bonds between \$400,000 and \$10 million to businesses for financing land, buildings, or equipment, for providing working capital, or for refinancing up to 100% of a project. The borrower must secure a form of credit enhancement from a bank (e.g., a letter of credit).

Contact information:

[http://www.inventpa.com/docs/business\\_financing\\_directory.pdf](http://www.inventpa.com/docs/business_financing_directory.pdf)

Tel: (717) 787-6245

E-mail: [ra-dcedloans@stste.pa.us](mailto:ra-dcedloans@stste.pa.us)

## **8. Pennsylvania Industrial Development Authority (PIDA)**

Low-interest loan financing up to \$1,250,000 (within Enterprise Zones and other targeted areas the maximum is \$1,750,000) through Industrial Development Corporations can be applied to land and building acquisitions, construction, and renovation resulting in the creation or retention of jobs.

Contact information:

[http://www.inventpa.com/docs/business\\_financing\\_directory.pdf](http://www.inventpa.com/docs/business_financing_directory.pdf) (for general information)

[http://www.dced.state.pa.us/PA\\_Exec/DCED/business/ida-idc.pdf](http://www.dced.state.pa.us/PA_Exec/DCED/business/ida-idc.pdf) (for the Industrial Development Authority & Corporation Contact list)

## **9. Small Business First (SBF)**

SBF provides low-interest loans up to \$200,000 or 50% of the total eligible project costs, whichever is less, to small businesses (100 employees or fewer) for land and building acquisition and construction, machinery and equipment purchases, and working capital.

Contact information:

[http://www.inventpa.com/docs/business\\_financing\\_directory.pdf](http://www.inventpa.com/docs/business_financing_directory.pdf) (for general information)

[http://www.dced.state.pa.us/PA\\_Exec/DCED/business/alo-list.pdf](http://www.dced.state.pa.us/PA_Exec/DCED/business/alo-list.pdf) (for information specific to the Area Loan Organization (ALO))

## **D. State of West Virginia**

### **1. Economic Infrastructure Bond Fund**

The West Virginia Infrastructure and Jobs Development Council provides financial assistance for projects likely to foster and enhance economic growth and development. Financial assistance is available to government agencies, partnerships, corporations, political subdivisions, associations, and limited liability companies for land/facility acquisition, new facility construction, and purchase of machinery or equipment.

Contact information:

[http://www.wvdo.org/community\\_development/INF\\_BOND.HTM](http://www.wvdo.org/community_development/INF_BOND.HTM)

Tel: (304) 558-4607

### **2. West Virginia Economic Development Authority Programs**

The West Virginia Economic Development Authority provides low-interest direct loans to expanding West Virginia businesses and to firms locating in West Virginia. It also provides loan insurance programs and a capital access program to assist firms that cannot obtain conventional bank financing. The Authority can provide for customized financing through the federal tax exempt industrial revenue bonds.

Contact information:

<http://www.wvdo.org/business/financing.htm>

Tel: (304) 558-3650

### **3. Jobs Investment Trust**

The West Virginia Jobs Investment Trust is a \$10 million public venture capital fund that uses debt and equity investment to promote and expand the state's economy.

Contact information:

<http://www.wvdo.org/business/financing.htm>

Tel: (304) 345-6200

### **4. West Virginia Capital Company Credit**

The West Virginia Capital Company Act was established to encourage the formation of venture capital businesses in West Virginia. For information, contact the West Virginia Economic Development Authority.

Contact information:

<http://www.wvdo.org/business/tax.htm>

Tel: (304) 558-3650